

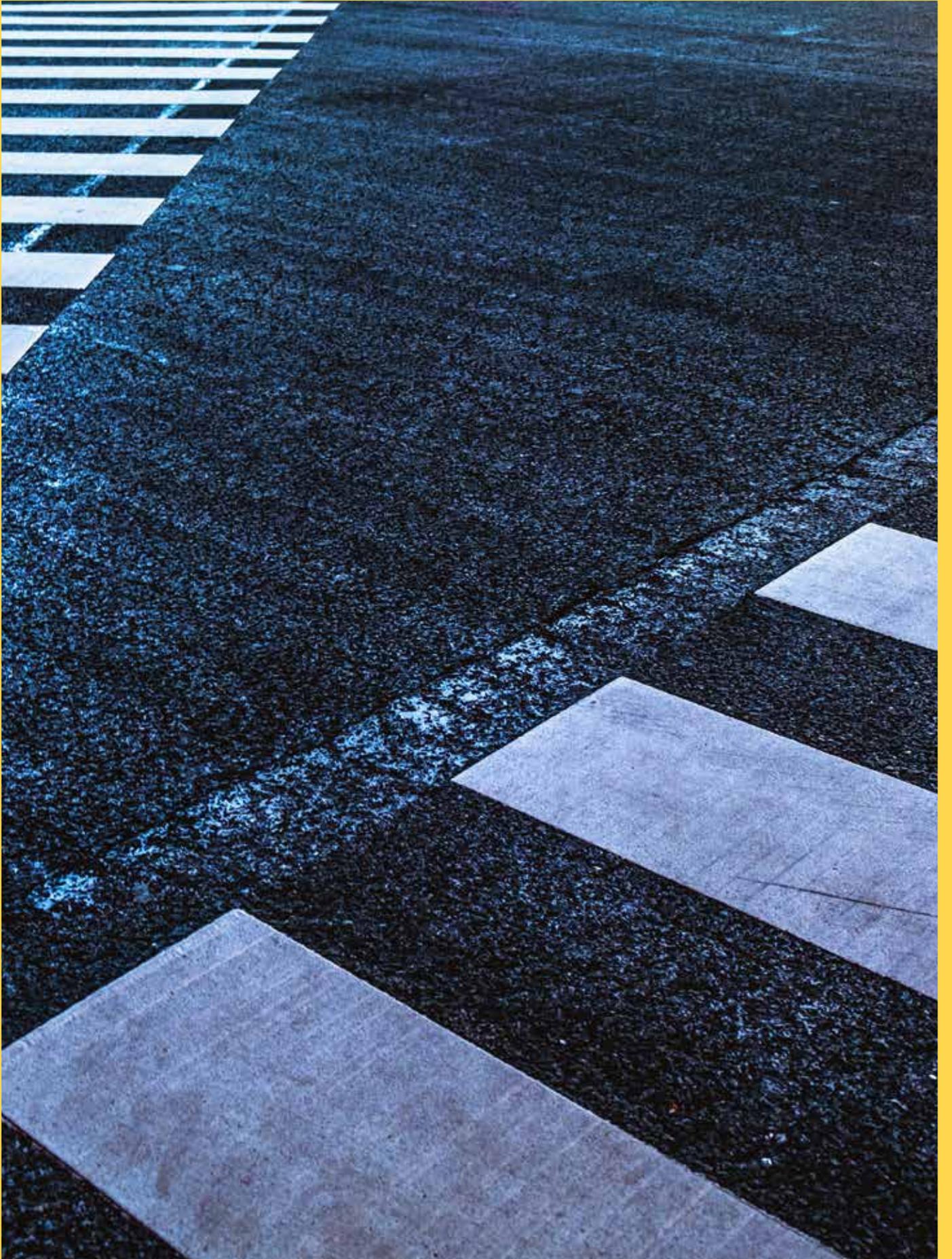
HOW CO-OP CAN BOOST YOUR BOTTOM LINE



UNIVERSITY OF
WATERLOO

What's inside

 Introduction	5
1 Skills gaps threatening growth	6
2 Tackling the challenges head on to boost the bottom line	8
3 Co-op education – real world experience	9
4 The value of integrating a co-op student into core business functions	10
5 A front row seat to cutting edge research	10
6 Varied experience	11
7 As the relationship grows, so does the level of responsibility	12
8 Diverse and fresh perspectives	12
9 The option to scale as needed	13
10 Pipeline for future talent	15
11 Quantifying the impact on the bottom line	16
12 Summary of the economic contributions from increased co-op employer profits	17
13 The employer's experience	19
14 Building a win-win for students and employers	20
15 About the University of Waterloo	21



INTRODUCTION

In the ideal business environment, organizations have the capacity and the opportunity to look for new ways to innovate so they can build or maintain their position as industry leaders.

In reality, most businesses are pushed to achieve continuous growth quarter after quarter with fewer resources. Disruptive new technologies and competitors are a constant threat. Rather than take time to innovate, many businesses struggle to simply keep up with daily demands. At the same time, employers have an ongoing challenge to attract the candidates that fall into the categories of brightest and best.

1 | SKILLS GAPS THREATENING GROWTH

As disruptive technology becomes available and companies collect more data than ever before, having employees with the right skills, attitudes and capacity presents one of the greatest challenges for many organizations.

In PwC's 22nd Annual Global CEO Survey, respondents reported significant barriers to making the most out of the information and technology that's already available. Many reported that although they can now access more data than ever before, they don't have employees with the right skills to understand and use the information for effective decision making. The same talent gap is also affecting the ability to implement artificial intelligence (AI) into business operations.¹

While CEOs ranked disruptive technology as a significant threat to growth just behind environmental/climate change over the next three years,² the availability of key skills is also having direct impact on growth. Fifty-five per cent of respondents saw this skill gap as causing an inability to innovate effectively and creating higher than expected people costs.

These same CEOs recognize that the ability to integrate AI into business processes has the potential to significantly impact business in the next five years (85 per cent), but noted that the information and talent gaps must be resolved before progress is possible.

Despite their need for a workforce with the right skill set, these same companies may not be creating the right culture to allow innovation to thrive. In KPMG's 2019 Global CEO Outlook, 84 per cent of CEOs are looking to employees to bring forward innovative ideas; however, only 56 per cent believe they have a culture that gives employees the room they need to fail fast and try new approaches.³



55% OF CEOs

believe a skills gap is preventing effective innovation and creating higher people costs

*As disruptive technology becomes available and companies collect more data than ever before, having employees with the **right skills, attitudes and capacity** presents one of the greatest challenges for many organizations.*

2 | TACKLING THE CHALLENGES HEAD ON TO BOOST THE BOTTOM LINE

To address this growing skills gap and attract and retain the brightest and best, CEOs report using a two-pronged approach: “Significant retraining/reskilling” of their current workforce (31 per cent) and “Establishing a strong pipeline” direct from education (31 per cent).⁴

Hiring co-op students is one solution that allows employers to combat these common issues in specific and effective ways. Co-op students introduce new ideas and diverse experience into the workplace. Hiring co-op students is equivalent to investing in innovation because it allows employers to test new processes and be nimble in how they react and respond to the results, allowing employers to experiment with new approaches over the relatively short commitment of a four-month work term. At the same time, co-op students can influence existing team members and, potentially, the overall culture in the workplace.

By bringing in co-op students, companies create a direct and effective pipeline for future talent. Over the course of a work term, employers can evaluate prospective employees and potentially train them on specific skills. For the students, it allows them to identify their priorities when looking for full time employment.

Overall, participating in a proven co-operative education program can help employers overcome common business problems and boost their bottom line.

3 | CO-OP EDUCATION – REAL WORLD EXPERIENCE

In 2019, the University of Waterloo engaged Deloitte Canada to uncover the institution's impact on the national, provincial and regional economies. The study concluded that Waterloo's Co-operative Education program is helping to prepare students for the workforce while also providing significant and quantifiable benefits for employers.

With a 60-year history with the co-op program, the University has a best in class reputation for successfully connecting businesses to co-op students, with a specific ability to identify and channel students to meet the needs of businesses. As a result, employers required less time and effort to hire the next generation of leaders.

*Hiring co-op students is equivalent to investing in innovation because it allows employers to test new processes and be nimble in how they react and respond to the results, allowing employers to experiment with **new approaches** over the relatively short commitment of a four-month work term.*

4 | **THE VALUE OF INTEGRATING A CO-OP STUDENT INTO CORE BUSINESS FUNCTIONS**

According to the [Deloitte Canada study](#), employers found they gained the best results when co-ops were integrated into core business and strategy problems. These students bring a unique perspective and experience to the business.

5 | **A FRONT ROW SEAT TO CUTTING EDGE RESEARCH**

By entering a workplace while still actively engaged with a university environment, students are immersed in learning about, and may even be involved in, the latest research into new technology or areas of discovery. Through their studies, co-op students are regularly exposed to cross-cutting technology platforms that leverage automation, e-commerce, big data and artificial intelligence.

While employers provide a real-world environment for co-op students to apply classroom learning, the students can contribute their unique insight on current research. Some students can also access a full network of educators and researchers who can potentially validate information and obtain real time updates on research progress.

6 | VARIED EXPERIENCE

Senior students who have had the benefit of working with different companies over the course of multiple work terms are able to cross-pollinate best practices and theories from one industry to the next. Most of the co-op work terms involve high intensity projects. This unique experience enables co-op students to bring a higher level of experience and expertise to each consecutive work term.

According to the Deloitte Canada study, employers found they gained the best results when co-ops were integrated into core business and strategy problems. These students bring a unique perspective and experience to the business.

7 | **AS THE RELATIONSHIP GROWS, SO DOES THE LEVEL OF RESPONSIBILITY**

When a co-op student remains with the same employer over successive work terms, the student's experience and confidence grows exponentially. Employers noted that they grew more comfortable and relied on these students to take on greater responsibilities. As a result, employers saw a higher return of investment with each term.

8 | **DIVERSE AND FRESH PERSPECTIVES**

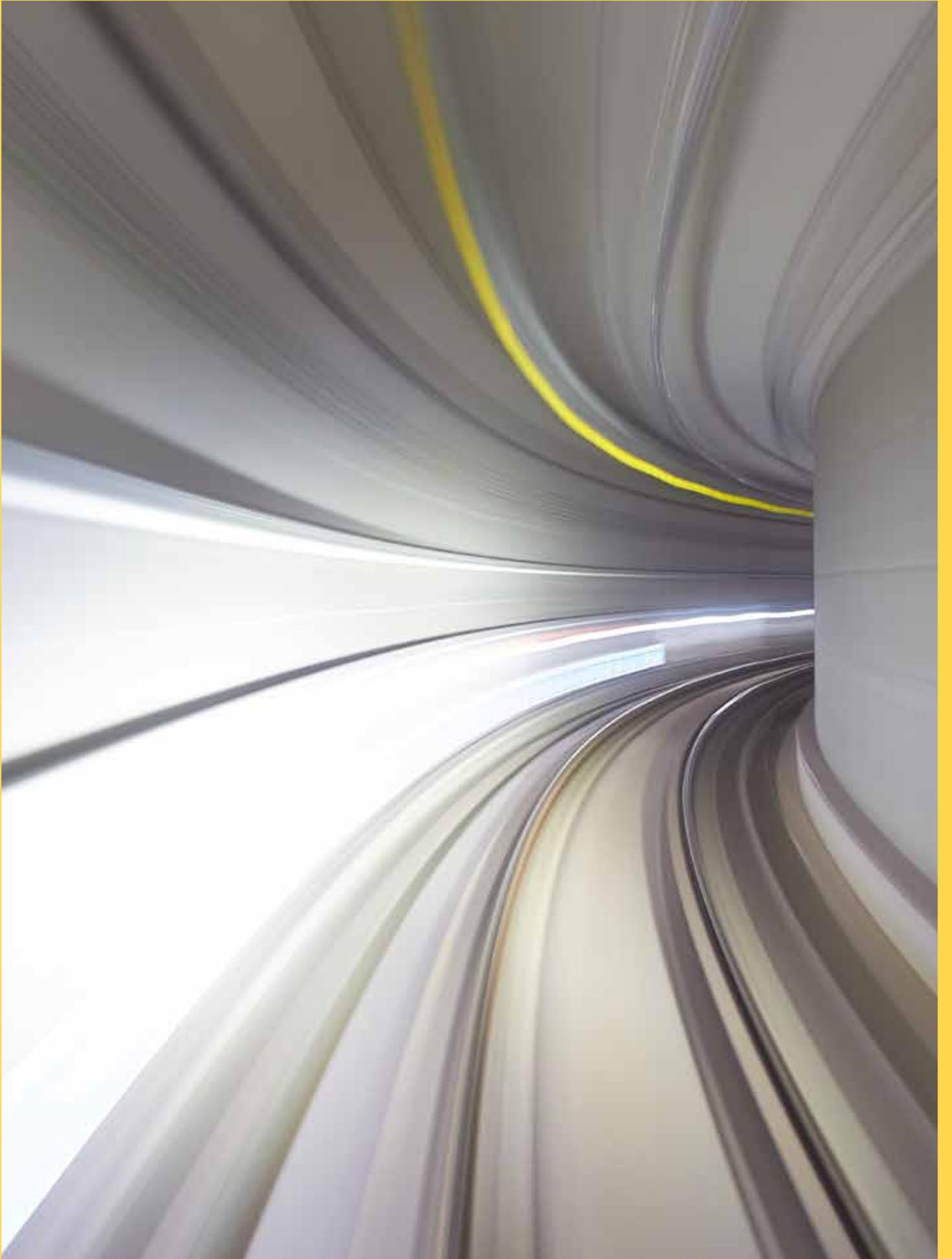
Coming from a learning environment, co-op students are regularly tasked with looking for innovative solutions to existing problems. In the workplace, they bring a fresh perspective and are open to contributing ideas and receiving feedback. When co-op students integrate and collaborate with the broader team, current employees also gain new insight and adopt new approaches to existing problems.

The students come from diverse backgrounds with many students having lived and worked around the world. Their lived experience offers insights and perspectives that can bring different cultural points of view, which can be critical for organizations that want to diversify their thinking.

9 | THE OPTION TO SCALE AS NEEDED

The co-op program also provides employers with the unique opportunities to scale up talent requirements for short periods of time. With terms lasting from four months or longer, employers can assign a term length to match the needs of a project. They can also hire larger, cross-disciplinary teams of co-ops as needs arise to explore complex challenges.

Employers noted that they grew more comfortable and relied on these students to take on greater responsibilities. As a result, employers saw a higher return of investment with each term.



10 | PIPELINE FOR FUTURE TALENT

The co-op program is a valuable mechanism in the race for talent in the most competitive industries. The Deloitte Canada study found that employers strongly agreed that the co-op program created a direct pipeline for future talent. Through a short-term commitment, employers are able to train and evaluate for specific skills and identify talent for the future.

Even when co-ops move on to other placements or work after graduation, they remain an important part of the organization's professional network as well as brand ambassadors and advocates. They also become an important channel for business referrals, supplier relationships and talent referrals. For example, a major technology company noted that co-op students often refer colleagues and become a valuable source of potential, diverse new talent.

Through a short term commitment, employers are able to train and evaluate for specific skills and identify talent for the future.

11 | QUANTIFYING THE IMPACT ON THE BOTTOM LINE

Employers can easily identify tangible benefits of hiring co-op students. Quantifying their contribution is a valuable tool to understand how participating as a co-op employer boosts the bottom line. Deloitte Canada was able to estimate the average annual employer gain of Waterloo co-op placements by using the following formula:

$$\boxed{\text{EMPLOYER GAIN}} = \boxed{\text{CO-OP STUDENT OUTPUT}} + \boxed{\text{CO-OP SUBSIDIES}} - \boxed{\text{CO-OP WAGES}} - \boxed{\text{CO-OP TRAINING COST}}$$

When factoring in the output of an average co-op student, Deloitte Canada adjusted the student’s output to reflect the early stages of employment, the training required and the short-term nature of the placement. They then considered the subsidies available for participating employers and considered the typical wage and estimated training costs based on average employee training cost figures reported for employers in Canada.

Deloitte estimates the total benefit to employers that hired Waterloo co-op students was approximately \$525 million over the 2018/19 academic year. This represents \$2 in economic gains by employers for every dollar invested in a co-op student. The table to the right provides a breakdown of benefit – measured as economic output plus subsidies less training and wage costs.

ESTIMATED TOTAL EMPLOYER GAIN FROM THE UNIVERSITY OF WATERLOO’S CO-OP PROGRAM, 2018/19

KEY COMPONENT	ORGANIZATIONAL BENEFIT
Total economic output	\$744M
Total subsidies	\$68M
Total wages	\$267M
Total training costs	\$21M
Total co-op employer gain	\$525M

12 | SUMMARY OF THE ECONOMIC CONTRIBUTIONS FROM INCREASED CO-OP EMPLOYER PROFITS

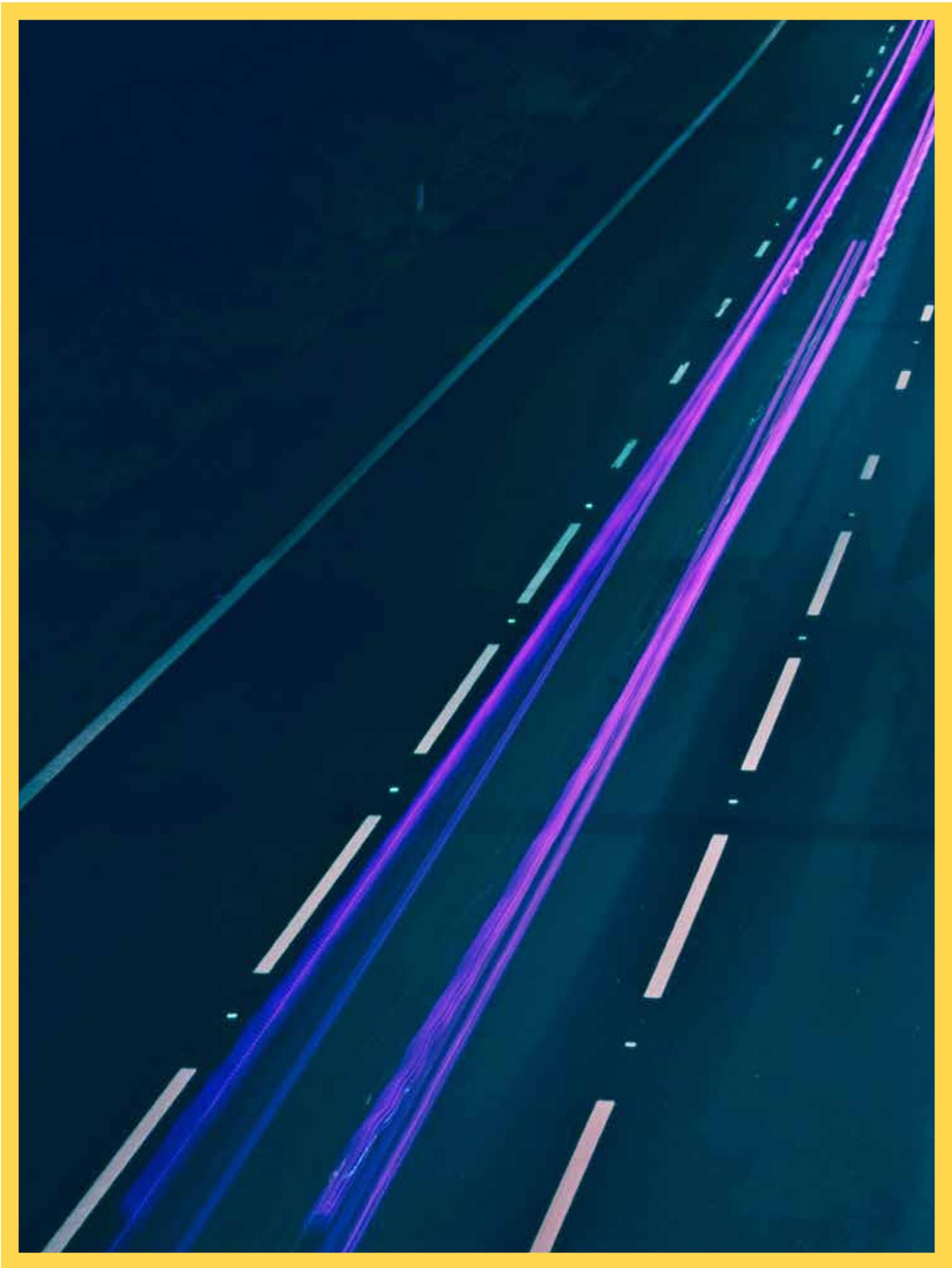
DIRECT, INDIRECT AND INDUCED CONTRIBUTION TO GDP FROM WATERLOO'S CO-OP PROGRAM

Deloitte calculated the following economic contributions from increased co-op employer profits for the year 2018/2019:

WATERLOO REGION	PROVINCIAL IMPACT	NATIONAL IMPACT
\$251M contribution to the local GDP	\$410M contribution to Ontario's GDP	\$567M contribution to Canada's GDP
\$143M in labour income	\$234M in labour income	\$310M in labour income
2,593 full-time equivalent (FTE) jobs	4,230 full-time equivalent (FTE) jobs across Ontario	5,779 full-time equivalent (FTE) jobs across Canada
\$12M to the region's government revenues	\$92M to Ontario's government revenues	\$138M to Canada's government revenues

Corporate profits can drive important contributions to the economy. When companies reinvest profits into their people, it improves the quality and strength of their workforce and can help increase employee retention. Profits are also used to invest in new technologies and machinery, which can drive efficiencies and help companies retain a competitive edge.

Employers realize \$2 in economic gains for every dollar they invest in Waterloo co-op students.



12 | *The employer's experience*

A **major multinational automotive company** that has participated in the program for 20 years, hires approximately 90 per cent of its co-op students from the University of Waterloo. The company validated that co-op students provide new perspectives that can be invaluable. They apply these fresh perspectives to real-life situations by tasking co-op students to come up with innovative, new solutions to existing production related challenges.

For example, students are tasked with finding potential efficiency enhancements in the car production process. The employer encourages the students to leverage ideas and solutions they've learned from their studies, life experiences and previous co-op terms in other industries. The resulting "out of the box" solutions and ideas are then tested and prototyped in collaboration with the broader team.

By empowering co-op students to share their ideas, the employer ensures that the larger team is focused on generating new ideas, and the students learn how to apply their education and experience to specific problems.

14 | BUILDING A WIN-WIN FOR STUDENTS AND EMPLOYERS

Students graduating from the University of Waterloo co-op program complete their undergraduate degree with the equivalent of up to two years paid work experience. While the program has obvious benefits for the students, including better employment options and the ability to earn a valuable income to offset the cost of education, the program also holds numerous benefits for employers.

Deloitte estimates co-op students contributed approximately \$525 million to their employers over the 2018/19 academic year.

In addition to their education and experience, co-op students also offer a new perspective – one that’s not influenced by time spent working in a specific industry or company. They are often able to look at problems and challenges in a different way and are open to sharing solutions and ideas. Their approach and attitude can also impact other employees, inspiring a culture of innovation and encouraging current employees to try new ways to tackle existing problems.

The knowledge, perspective and ideas these students bring to their co-op terms provide employers with a clear competitive edge, as well as a direct line to future-ready talent. Employers, on average, see a return of two dollars for every dollar they invest in a co-op student. In total, Deloitte estimates co-op students contributed approximately \$525 million to their employers over the 2018/19 academic year.

As technological disruption continues to change the nature of work, Waterloo will continue to leverage its co-op advantage by ensuring learning in the workplace is embedded into the curriculum to benefit students and co-op employers alike.

ABOUT THE UNIVERSITY OF WATERLOO

The University of Waterloo pioneered the concept of co-operative education. In fact, when the University was founded in 1957, the co-op program immediately became a fundamental part of the University of Waterloo’s approach to education.

After 60 years, the University is home to the largest and oldest co-op program in North America. The program began by matching 74 engineering students with employers as a way to apply their learnings. It is now available in all six faculties and 120 programs. The University currently works with more than 7,000 active employers across a variety of industries and posts more than 25,000 full time positions each year in more than 60 countries.



120

ACCREDITED CO-OP PROGRAMS



60 COUNTRIES

CO-OP PROGRAM OFFERS WORK TERMS IN OVER 60 COUNTRIES



\$12,396

ACROSS ALL FACULTIES, STUDENTS EARNED \$12,396 ON AVERAGE PER CO-OP WORKING TERM



21,606

UNDERGRADUATE CO-OP STUDENTS ENROLLED AS OF FALL 2017



92%

OF WATERLOO’S CO-OP GRADUATES ARE EMPLOYED WITHIN SIX MONTHS OF THEIR GRADUATION



7,100

EMPLOYERS PARTICIPATE FROM THE UNIVERSITY’S CO-OP PROGRAMS

LEARN MORE | **UWATERLOO.CA/HIRE**

Learn more about how a University of Waterloo co-op student can make a difference in your organization.

UNIVERSITY OF
WATERLOO



200 UNIVERSITY AVE. W., WATERLOO, ON, CANADA N2L 3G1

uwaterloo.ca/hire